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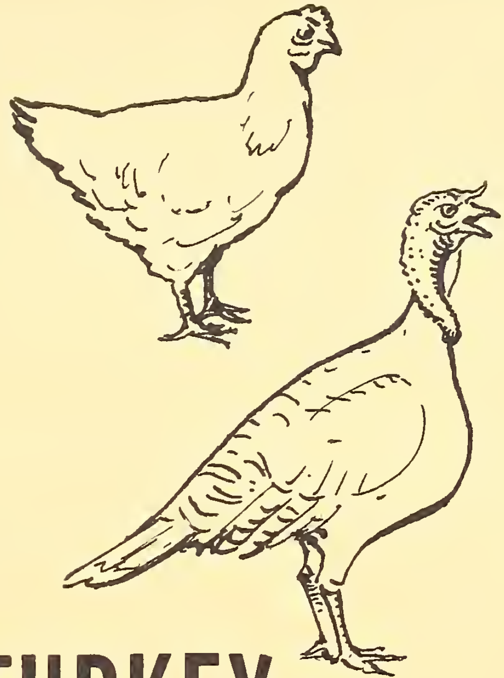

BROILER and TURKEY FEED FINANCING BY COOPERATIVES

By George C. Allen

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Joseph G. Knapp, Administrator

The Farmer Cooperative Service conducts research studies and service activities of assistance to farmers in connection with cooperatives engaged in marketing farm products, purchasing farm supplies, and supplying business services. The work of the Service relates to problems of management, organization, policies, financing, merchandising, product quality, costs, efficiency, and membership.

The Service publishes the results of such studies; confers and advises with officials of farmer cooperatives; and works with educational agencies, cooperatives, and others in the dissemination of information relating to cooperative principles and practices.

This study was conducted under authority of the Agricultural Marketing Act of 1946 (RMA, Title II).

Contents

Highlights

This initial study covered the broiler and turkey feed financing programs of nine regional farm supply cooperatives located throughout the United States. The plans were of two types--contract and secured.

One of the associations studied used both types of feed financing plans; six associations had eight different contract financing programs; and four associations had a total of six different secured financing plans. Altogether, the nine associations had 14 different poultry feed financing plans.

This report covers the business years 1956-62, inclusive, for most of the associations. It is primarily descriptive, though some suggestions for improving existing programs are given and some guidelines for cooperatives or other businesses interested in introducing such plans.

Contract Financing Plans

Under contract plans, the cooperatives provided the chicks or poults, feed, and medications; retained title to the birds fed; shared in gains and losses; and made most of the management decisions.

Principal findings regarding the contracting plans studied were:

- Two associations administered contracting systems through local associations and other private agencies, four associations contracted directly with growers, and one did both. Local associations and dealers had arrangements with their regional associations for sharing risks and gains.

- Responsibilities of contracting parties were stated in all contracts in broad terms. Flock management procedures were not explicit in most contracts studied.

- All contracts required the grower to furnish labor and physical facilities. Responsibilities for intangibles such as insurance or risk transfers varied with individual associations.

- All contracts stipulated the association's right to decide when birds were marketable and the selling price.

- Settlement procedures varied by association and period of contracting. Settlements with growers became less liberal as prices declined.

- Contracting associations absorbed production losses. Patronage refunds were retained to help offset any production loss. Any balance remaining after losses went to the individual grower in the form of stock certificates or was held in escrow to offset possible future contract losses.

- Contracts of two associations did not indicate time or duration. Contracts of four associations did.

- During the peak year 1959, contract feed accounted for about one-third of total feed sales for the associations under study.

- Financial losses in contracting broilers have been common within all cooperatives in this study.

- Associations not fully integrated in their broiler and turkey contracting programs had less successful operations and fewer incentives for contract innovations.

- Cooperatives indicated that contract financing is necessary to provide the services available through other feed businesses.

Secured Financing Plans

Under secured financing plans, growers retained title to the birds and pledged them to the cooperatives as security or collateral for loans for feed and other supplies. Growers realized all gains, assumed all losses, and usually made most of the management decisions.

Two of the secured plans studied covered broilers; four covered turkeys. Principal findings with regard to these six secured financing plans were:

- Security required from growers receiving extended credit was usually a first chattel mortgage on the flock and feed, plus additional attachments on property when cooperatives believed this was needed.

- Growers were selected on the basis of current credit considerations, previous credit performance, feed requirements, and production experience.

- One association made cash advances to purchase baby chicks or poults when this would mean significant savings.

- Credit limits were flexible in most associations for most programs. Some associations established maximums applicable to all producers.

- Associations made the usual 6 percent per annum interest charge. On notes past due, interest increased to 1 percent a month on the unpaid balance until paid in full.

- Some associations set up definite schedules that provided for payments on accounts to be made concurrently with sale of poultry. Others required that sale checks be made payable jointly to association and producer and proceeds applied to the account.

- Experience with secured financing programs has been favorable for most associations. These programs have helped maintain or increase feed volume. Losses have been nominal for most programs.

Summary of Suggestions

Some guidelines or suggestions for management and directors of cooperatives and other businesses interested in financing broiler and turkey feeds follow:

1. Determine volume of broiler and turkey feed needed for your mill to break even and to realize reasonable net margins.

2. Determine how much financing you will need to provide to get these volumes.

3. Decide the role your organization is to take in providing integrated services for broiler and turkey producers. If you decide to establish a feed financing program, it appears advisable to provide vertically integrated services that are fairly complete for most of the producers financed.

4. Determine how much of your total assets you wish to allocate to finance broiler and turkey production and to provide other integrated services.

5. Select and develop concentrated areas in which to provide feed financing services.

6. Finance feed with independent producers to the extent possible.

7. Select growers carefully--both for contract financing and independent production financing.

8. Handle contract production directly with producers rather than through local dealers, agencies, or cooperatives if your organization is regional in scope.

9. Keep detailed records on each phase of a program.

10. Require producers to carry part of the risks and thus share in losses as well as gains.

11. Use concise contracts that clearly state the responsibilities of each party.

12. Encourage good management and competent production by using feeding efficiency schedules coupled with grower incentive payments.

13. Use procedures in financing feed to independent producers that established lending agencies have found to be sound.

14. Endeavor to make periodic estimates of price trends, market conditions, and related information.

Broiler and Turkey Feed Financing by Cooperatives

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The frequent and far-reaching changes taking place in the poultry industry have directed increased attention to producers' needs for credit.

Many farmers have entered into contract programs with feed firms and poultry processors to help expand operations, reduce risks, acquire technical information, and establish marketing outlets. Feed companies offer contract programs to maintain or increase their feed volume; processors use contracts as a means of assuring a dependable, even supply of birds for their plants.

Some farmer cooperatives, as well as other firms handling feed and poultry, offer contract services; others provide production-type loans. These cooperatives are confronted with various problems in supplying contract services to farmer-members.

Their farmer directors and managers thus have a real interest in obtaining basic information on types of feed financing programs and procedures other cooperatives have used.

Data on other associations' experiences with production financing and contract programs where feed is the major item can help them provide more effective financial and production services for their own members.

Purpose and Scope of Study

This report is based on an initial study of the feed financing plans that nine farmer cooperatives provided for broiler and turkey producers. Some of the associations studied also had financing programs for layer and livestock feeds. These will be covered later in separate reports. The study covered the period 1956-62 for most associations.

[1] Charlie B. Robbins did the initial fieldwork and manuscript preparation, but transferred to another agency before the study was completed.

Note: Appreciation is expressed to officials of the farmer cooperatives who provided information on their financing programs and to J. Warren Mather, Chief, Farm Supplies Branch, Farmer Cooperative Service, for assistance in planning and directing this study.

Objectives

Objectives of this study were:

1. To determine types of plans cooperatives used to finance feeds, including their systems, policies, and practices for maintaining decision-making and independence of farmer-members.

2. To indicate distinctive procedures followed in handling risks, gains or losses, and in encouraging efficient production.

3. To determine operating results, problems encountered, and ways efficiency might be improved.

4. To develop suggestions or guidelines for associations now providing feed financing or contemplating such service.

While we do discuss in this report the major changes cooperatives have made in their feed financing programs, such as adjustments in feed conversion and risk sharing, we have made no attempt to describe and appraise all the detailed changes. Nor did we try to determine the relative place of feed financing and other contract operations in cooperatives whose members are engaged in different types of farm enterprises.

The study did not cover feed financing by credit corporations or credit associations sponsored by or operated as subsidiaries of the cooperatives.

Types of Plans

The financing plans of the nine cooperatives were classified into two types, contract and secured. These terms are defined as follows:

Contract financing plans are those under which the cooperative provided members with chicks or poults, feed, and medications; retained title to the birds; shared in gains and losses; and made most of the management decisions.

Secured financing plans are those under which individual growers purchased chicks or poults, feed, and medications; retained title to the birds and pledged them as security or collateral for feed and other supplies financed by the cooperative; realized all gains and assumed all losses; and usually made most of the management decisions.

The plans had similar features in some instances. For example, some cooperatives with secured financing plans provided close field supervision over flocks and influenced members' marketing decisions.

Under the secured plans, feed was financed as a separate item. In contract plans, feed accounted for about two-thirds of the value of items supplied to producers; chicks or poults, fuel, litter, insurance, and the like made up the remainder. "Package" contracts provided for other services such as flock supervision, processing, and marketing.

We limited our study of contract plans to programs dealing with production of live birds, without taking into consideration net margins on feed or on such services as hatching, processing, and selling. Some associations did not provide any of these services; others offered them on a limited scale.

Cooperatives Studied and Plans Used

The nine cooperatives studied were located in various parts of the United States and conducted substantial feed business at wholesale or retail levels.

In 1959, 244 cooperatives in the United States financed $94 million worth of feed. Eighty-four associations financed $54 million worth of feed on a contractual basis where title to poultry and livestock was held by the cooperative. The nine cooperatives studied accounted for 76 percent of the total feed financed on a contractual basis and also for

27 percent of that financed on a secured basis.[2]

Four of the associations in the study had feed financing programs for both turkeys and broilers; four had programs for broilers only; and one, turkeys only. The nine cooperatives had a total of 14 different turkey and broiler feed financing programs. Eight were contract programs--seven for broilers and one for turkeys. Six were secured programs--two for broilers and four for turkeys (table 1).

All the cooperatives in this study also extended ordinary open account credit to their poultry producing members for items required in other phases of their farming operations and to other types of producers. We did not analyze these credit operations as they were studied along with those of other cooperatives in 1957.[3]

Broiler Feed Financing

This section describes, compares, and analyzes the seven contract programs used by six cooperatives and the two secured financing programs used by two associations to finance feed and other items for broiler production.

Contract Plans for Broilers

First used in the late forties, broiler production contracts expanded rapidly during the fifties. Farm supply cooperatives turned

[2] Gessner, Anne L. Integrated Feed Operations Through Farmer Cooperatives. Farmer Cooperative Service, U.S. Dept. of Agri. Gen. Rpt. 100, April 1962.

[3] Robbins, Charlie B., and Rickey, Lacey F. Controlling Open Account Credit in Feed Cooperatives. Farmer Cooperative Service, U.S. Dept. of Agri. Circular 24, Sept. 1957.

Table 1.--Type and number of feed financing plans used by 9 farm supply cooperatives in 1961

Type of financing and association code	Number of financing plans for:		
	Broilers	Turkeys	Total
Contract financing:			
A	1	--	1
B	1	--	1
C	1	--	1
D	1	1	2
E	2	--	2
F	1	--	1
Total	7	1	8
Secured financing:			
E	--	1	1
H	1	1	2
I	1	1	2
J	--	1	1
Total	2	4	6
Total plans	9	5	14

Contract feed financing by farmer cooperatives has enabled small-flock producers to raise broilers as a supplement to other farm income.

to them in an effort to retain or increase existing feed volume and to provide their members with services similar to those other feed businesses were offering. The fast rate of turnover of broilers and opportunities to improve production efficiency were responsible for much of the rapid growth of this type of contract farming.

Three regional cooperatives whose contract plans we studied had agreements with member local associations. These locals in turn had feeding contracts and security agreements with growers and assumed part of any liabilities that resulted from losses.

These three cooperatives also contracted direct with growers and assumed most or all risks and liabilities or losses as well as opportunities for gain. The other three cooperatives followed the latter system--direct contracts with growers.

Principal provisions of broiler contract financing programs studied will be discussed under the following headings: Association responsibilities, grower responsibilities, consent to sell, final settlement, incentive provisions, loss liabilities, security instruments, contract period, and contracting experience.

Association Responsibilities

Responsibilities of associations varied to some degree in what they furnished to broiler growers. In this study, five associations, A, C, D, E, and F, originally supplied baby chicks and all feed, litter, sanitation, and medicinal requirements necessary to produce marketable broilers. The value of these supplies was charged to each grower's account and deducted from broiler sales proceeds.

Association B furnished and delivered to growers the chicks and all feed, grit, sanitation supplies, and medication necessary to grow marketable broilers. The association paid insurance charges and taxes on the flock. It also provided growers with needed equipment and gave general instructions for broiler care. This association maintained records of production costs, weight, and value of each flock when received for processing. A statement was furnished each grower within 10 days after each flock was marketed.

Association A specified that insurance on the flock was carried at $2 for each 1,000 chicks. This charge was added to the grower's account and withheld from sale proceeds. Association D specified only that insurance was included as a production cost. Associations C, E, and F did not indicate that insurance was carried on broiler flocks.

All associations employed poultry specialists for flock inspections and to assist growers with problems arising during production. These specialists were responsible for seeing that growers complied with contract provisions and gave birds needed care and attention.

Grower Responsibilities

Responsibilities of growers producing broilers under contract were essentially the same in all associations. Some contracts were explicit, with growers' responsibilities given in detail; others probably required supplemental instructions.

Growers furnished all land, buildings, equipment, and labor for their broiler operations. Some contracts also specified that they furnish all litter and fuel at their own expense.

The contract growers assumed no liability to the cooperative beyond that of caring and properly accounting for the items placed in their custody.

Associations A, C, D, E, and F used conditional sales contracts. These indicated that growers owned the birds by stipulating that growers were to buy from the association, at prices in effect on date of delivery, the baby chicks, feed, and sanitation supplies necessary to raise marketable broilers. Yet title to the birds remained with the associations until the broilers were sold. Growers' risks were limited to their contracted responsibilities.

The contract of Association B was of the bailor-bailee type and specified that the association was sole owner of birds and production supplies. Growers furnished litter, electricity, housing, and labor as required under the terms of the contract and received a predetermined, graduated flat fee settlement for each flock. The association assumed all losses and decided when the birds would be sold.

This flat-fee type of contract could be called a guaranteed income system. It was designed primarily to maintain production at a relatively high level by assuring a basic income for growers at all times.

Growers under this contract were required to use their best efforts to produce marketable broilers as rapidly as possible. They were required to return all feed bags and other containers used for delivery of supplies, and also to return all unused feed and other materials upon termination of the agreement.

Consent to Sell

Contracts of Associations A, C, D, E, and F specified that they would determine when broilers were ready for market, to whom birds would be sold, and selling prices.

The contract of Association B specified that birds would be removed from growers' farms to the association's processing plant from 63 to 72 days after chicks were placed and when, in the sole opinion of the association, they were ready for market.

Final Settlement

Associations A and F made final settlement with growers on the basis of feed conversion and selling price. Association C gave growers a choice of accepting this basis or 75 percent of the net returns, whichever was greater. Association E used 80 percent of net returns for one contract; and feed conversion, or 80 percent of net returns, for their second contract. In Association B, settlement was made on the basis of weight and selling price.

Association D shared net returns on the basis of 38 percent to the producer; 25

percent to the cooperating hatchery; 10 percent to the local cooperative; and retained the remaining 27 percent.

All proceeds remaining after final settlement were retained by Association A. These funds were placed in a separate reserve earmarked to offset any future losses on flocks grown under contract.

Two associations, C and E, retained any proceeds remaining after production costs. Association B divided these proceeds equally with growers. Producers in Association F received proceeds remaining after production costs were paid.

Incentive Provisions

Growers producing broilers under contracts with incentive provisions can increase their income by improving their feed conversion. Table 2 shows how this works.

Assume a grower delivered 10,000 marketable broilers weighing 35,000 pounds that have consumed 84,000 pounds of feed. These birds weighed an average of 3.5 pounds each and had a feed conversion of 2.4 pounds of feed per pound of bird. The grower, therefore, received 7.75 cents per marketable broiler, or a total of $775 when the farm price was above 16 cents a pound.

If the farm price was between 14.1 and 16 cents a pound, inclusive, the amount received by grower would be reduced by 1.5 cents a head, or $150, leaving a total of $625. For farm prices of 14 cents or less a pound, the amount would be reduced by 2.5 cents a head or $250, leaving a total of $525 to the grower.

Growers agreed to accept these settlements as final and full payment for their labor, use of their facilities, and for the supplies they furnished.

Loss Liabilities

Methods of handling losses differed in each association. Association A assumed

Table 2.--Incentive rate table based on feed conversion and market price of more than 16 cents a pound[1]

Feed conversion (pounds of feed per pound of bird)	Incentive pay for birds of specified weight					
	Below 2.75 lbs.	2.751 to 3.00 lbs.	3.001 to 3.25 lbs.	3.251 to 3.50 lbs.	3.501 to 3.75 lbs.	Above 3.751 lbs.
	Cents per bird					
Under 2.10	8.00	9.00	10.25	11.00	11.75	12.50
2.10 to 2.199	7.50	8.50	9.50	10.25	11.00	11.75
2.20 to 2.299	6.75	7.75	8.75	9.50	10.25	11.00
2.30 to 2.399	6.00	7.00	8.00	8.75	9.50	10.25
2.40 to 2.499	4.50	5.50	7.00	7.75	8.50	9.25
2.50 to 2.649	4.00	4.50	6.00	6.75	7.50	8.25
2.65 to 2.749	4.00	4.00	4.00	4.75	5.50	6.25
2.75 to 2.899	4.00	4.00	4.00	4.00	4.50	5.25
2.90 to 2.999	4.00	4.00	4.00	4.00	4.00	4.25
3.00 to 3.249	4.00	4.00	4.00	4.00	4.00	4.00
Over 3.25	0.00	0.00	0.00	0.00	0.00	0.00

[1] Incentive pay is pegged to market price. When farm price of broilers is 16 cents a pound or less, deduct 1.5 cents a head from incentive rate shown in table. When farm price of broilers is 14 cents a pound or less, deduct 2.5 cents a head. When farm price of broilers is below 13 cents a pound, deduct 3.5 cents a head.

all liability and growers were required to assign all patronage refunds due on broiler supplies purchased. These refunds were placed in a special escrow account established to defray direct costs and expenses and a fair share of the general overhead chargeable for services performed under provisions of the contract.

As mentioned, growers in Association B received a flat fee or guaranteed income and never assumed liabilities for chicks and supplies used.

If a loss occurred on a flock grown under contract with Association C, the grower did not receive any payment except that provided for production efficiency. He was relieved from all liability for loss unless he sold or disposed of any of the broilers without consent or approval of the association. If a loss developed during the fiscal year, the producer authorized the association to retain any or all patronage refunds on marketing operations or broiler supplies equal to the amount of the loss.

Association D relieved growers of liability from loss due to mortality, low prices, or other production factors. However, if producers sold or disposed of broilers without consent of the local association, they were fully liable for the purchase price of all chicks and supplies. Growers authorized patronage refunds declared on broiler production supplies for each contract year to be applied against all losses sustained on flocks grown under contract. Any balance of such refunds over and above the amount of losses was returned to them.

Association E assumed all liability for loss, except that growers were responsible for cost of chicks and production supplies if they sold or disposed of any or all birds without approval of the association. If a loss occurred, growers did not receive any patronage refunds declared on broiler supplies. Payments made to growers for production efficiency were classified as production costs for the purpose of determining net income from the flock.

In Association F, growers were relieved of all liability if a loss occurred on a flock grown under contract, provided they had followed management practices specified by the association.

Security Instruments

Security requirements in the contracts studied differed in wording but accomplished the same end results. In all cases where security was required, title to chicks and supplies remained in the association. This in effect made associations the owners of birds and supplies and placed growers in the position of bailees; that is, persons to whom the birds and supplies were delivered in trust for a specified purpose.

Association A is a regional cooperative that worked through local associations. The locals held a "purchase money security interest" (chattel mortgage) and a 6 percent per annum note that matured in 3 months. Locals assigned all paper to the regional and thus transferred title and interest to the property therein described.

In its contract, Association B indicated that it was the sole owner of the birds. Therefore, no type of security instrument was necessary.

Association C required conditional sales contracts wherein title of chicks, unconsumed feed, and sanitation supplies remained in the association as security until the purchase price, together with any other indebtedness of growers arising from broiler production, was paid in full.

Association D required broiler producers to give its local member associations conditional sales contracts wherein title to all chicks and production supplies for each flock remained in the locals until the flock was marketed. Producers acknowledged that locals could assign conditional sales contracts to the regional association as security, and that such assignment included all rights that pertained to assigned contracts.

Association E retained title to chicks, unconsumed feed, and other supplies until it marketed the flock.

In its contract, Association F indicated that all unused supplies furnished growers for broiler production remained its property. Also, the association retained title to the birds until it sold them.

Contract Period

Contracts usually stated the length of time that growers agreed to produce broilers for the association and conditions under which the contracts could be terminated. However, contracts of Associations C and F had no duration or termination provisions.

Association A's contract terminated when the flock was marketed and all obligations satisfied unless renewed by the local association.

The contract of Association B became effective when both parties signed it and received a copy. It continued in force until 30 days after either party gave written notice of election to terminate. Termination could not occur as long as the grower had a flock of the association's broilers.

Contracts of Associations D and E did not specify their duration or the length of time that growers agreed to produce broilers. They could be terminated at any time by either party giving notice to the other. Such notice of termination did not affect any flock or flocks currently under production.

Contracting Experience

The associations have had varied experiences with broiler production contracts. All encountered financial difficulties in some degree, with heavy losses occurring in 1959, 1960, and 1961.

The operating results reported here deal with contract production of broilers and do not reflect net margins realized in manufacturing feed used in the contract operation. Neither do they reflect net margins on the hatchery, poultry processing, and marketing operations which were integral parts of the broiler contract programs in some associations.

Also, the effects of financed feed volume on overall feed manufacturing unit costs and of increased poultry volume on hatchery and poultry processing unit costs were not considered in this report. Operating results could not be shown for individual associations but ranges are included in a later section dealing with a composite analysis of the associations.

Association A experienced a rapid increase in broiler contracting from 1956 to 1959. Number of birds financed increased from 700,000 to 4.1 million and dollar volume of contract feed rose from almost $350,000 to over $1.7 million--about 23 percent of total feed sales (table 3). In 1960, value of contract feed was reduced 50 percent, increased to $1.4 million in 1961, and dropped to $1.3 million in 1962. The average number of birds financed per contract jumped from 4,074 in 1956 to 9,305 in 1961, and to 12,400 in 1962.

Small contract production losses occurred for the first time in 1957. During the next 2 years, they averaged between 6 and 7 cents a bird--equivalent to 15 to 17 cents per dollar of contract feed volume.

Contract production of broilers in Association B increased from less than 200,000 birds in 1956 to around 1.5 million in both 1958 and 1959, and then declined sharply the next 2 years--to about 325,000 in 1961. Contract feed increased from $120,000 in 1956 to $768,000 in 1958--equal to about 19 percent of total feed sales--but declined to $124,000 in 1961. Average number of birds per contract was 10,000 in 1956, dropped to 7,965 in 1957, then increased to more than 10,000 in 1960 and 1961.

Production losses were about 2.5 cents a bird or 5 cents per dollar of feed in 1957

Table 3.--Broiler contracting experiences of 6 farmer cooperatives, 1956 to 1962

Year	Contracting experiences of associations					
	A	B	C	D[1]	E	F
			Value of contract broiler feed $1,000			
1956	$348	$120	$1,620	$10,902	[2]	[3]
1957	536	601	3,989	19,500	$650	[3]
1958	1,096	768	5,585	21,900	5,500	[4]
1959	1,740	607	7,040	32,000	3,500	[4]
1960	819	210	9,568	16,375	1,380	$4,345
1961	1,393	124	11,281	15,600	2,250	3,472
1962	1,286	[4]	15,124	10,735	3,318	[4]
			Total feed sales $1,000			
1956	$7,400	$3,300	$5,100	$43,000	$10,000	$6,100
1957	6,800	3,700	8,300	54,600	10,000	5,900
1958	7,800	4,100	11,200	62,100	15,700	6,200
1959	7,600	4,100	15,100	71,300	17,200	7,500
1960	6,600	4,200	16,600	48,000	18,100	7,100
1961	6,300	4,400	18,700	45,000	19,800	7,900
1962	6,580	4,900	18,680	31,300	21,000	7,954
			Contract broiler feed as a percent of total feed sales			
1956	4.7	3.6	31.8	25.3	[2]	[3]
1957	7.9	16.2	48.1	35.7	6.5	[3]
1958	14.0	18.7	49.9	35.2	35.0	[4]
1959	22.9	14.8	46.6	44.8	20.3	[4]
1960	12.4	5.0	57.6	34.1	7.6	61.2
1961	22.1	2.8	60.3	34.6	11.3	43.9
1962	19.5	[4]	80.9	34.2	15.8	[4]
			Total birds 1,000			
1956	713	180	8,946	[5] 24,227	[2]	[3]
1957	1,161	1,370	14,659	44,971	1,000	[3]
1958	2,671	1,558	21,890	50,980	10,000	[4]
1959	4,099	1,463	28,179	75,492	6,440	[4]
1960	2,459	596	35,756	39,458	3,112	[5] 7,738
1961	3,499	323	42,718	39,096	4,640	[5] 9,498
1962	3,672	[4]	39,895	26,842	8,213	[4]
			Number of contracts			
1956	175	18	2,084	4,223	[2]	[3]
1957	259	172	3,047	8,951	100	[3]
1958	609	176	3,895	9,947	1,000	[4]
1959	614	144	4,553	13,599	600	[4]
1960	323	55	5,100	6,312	400	[6] 996
1961	376	31	5,766	5,397	350	[6] 1,003
1962	296	[4]	4,801	3,528	743	[4]

See footnotes at end of table.

(Continued)

Table 3.--Broiler contracting experiences of 6 farmer cooperatives, 1956 to 1962 (continued)

Year	Contracting experiences of associations					
	A	B	C	D[1]	E	F
	Average number of birds per contract					
1956	4,074	10,000	4,293	5,737	([2])	([3])
1957	4,483	7,965	4,811	5,024	10,000	([3])
1958	4,386	8,852	5,620	5,125	10,000	([4])
1959	6,676	10,160	6,189	5,551	10,733	([4])
1960	7,613	10,836	7,011	6,251	7,780	7,769
1961	9,305	10,419	7,409	7,244	13,257	9,470
1962	12,405	([4])	8,310	7,608	11,054	([4])

[1] Exclusive of sales to other regional cooperatives.
[2] Association's first full year's contract operation was 1957.
[3] Association began commercial contracting in November 1957.
[4] Data not available.
[5] Number of birds settled.
[6] Number of flocks.

and 1958. Low prices prevailed during 1959 and losses climbed to more than four times these amounts. The association suspended the "flat-fee guarantee" proviso in 1960 and thus prevented any loss that year. With the slight broiler market recovery in 1961 and a rapidly declining number of growers, the association reinstated the flat-fee contract provision. Operations resulted in an average loss exceeding 2 cents a broiler and 5.5 percent of contract feed volume.

Association C increased broiler operations steadily for 6 years--from 8.9 million birds in 1956 to about 42.7 million birds in 1961, then dropped to 39.8 million in 1962. Average number of birds per contract went from 4,293 to 7,409 to 8,300 in these years. As a result, value of contract feed increased from $1.6 million in 1956 to $11.3 million in 1961 and $15.1 million in 1962. It accounted for 80 percent of the association's total feed sales in 1962.

Production losses ranged from 0.2 to 1.3 cents a bird--or equivalent to 1 to 5 cents per dollar of contract feed volume--from 1956 through 1960. Losses then increased to nearly 3.5 cents a bird or 13 cents per dollar of feed in 1961 as a result of the depressed broiler market. This association has integrated its broiler operations more completely than any of the other associations in the study. This may explain, to a substantial degree, its overall success in the enterprise.

Association D expanded its broiler contracting from about 24 million birds in 1956 to over 75 million in 1959. Operations were sharply reduced to about 39 million birds in 1960 and 1961 and to 27 million birds in 1962.

Average number of birds per contract declined from 5,737 in 1956 to 5,125 in 1958. In 1959, this trend was reversed and, although total contract production was reduced, average flock size continued to increase. By 1962 the average reached 7,600 birds per flock.

Dollar value of contract feed rose from about $11 million in 1956 to $32 million in 1959; then dropped to less than $17 million in 1960 and has continued to drop each year thereafter.

Contract feed volume since 1956 has made up more than 25 percent of total feed sales

for the cooperative. In 1959 nearly 45 percent of total feed dollars was accounted for in broiler production contract sales. By 1962, this ratio had declined to slightly over 34 percent, reflecting reduced broiler contract production.

Contract production losses averaged about 4 cents a bird or 9 to 10 cents per dollar of contract feed in 1956, 1957, and 1960. They were lowest--2.5 cents a bird or 6 cents per dollar of contract feed--in 1958, and highest in 1959--8.8 cents a bird or 22 cents per dollar of contract feed.

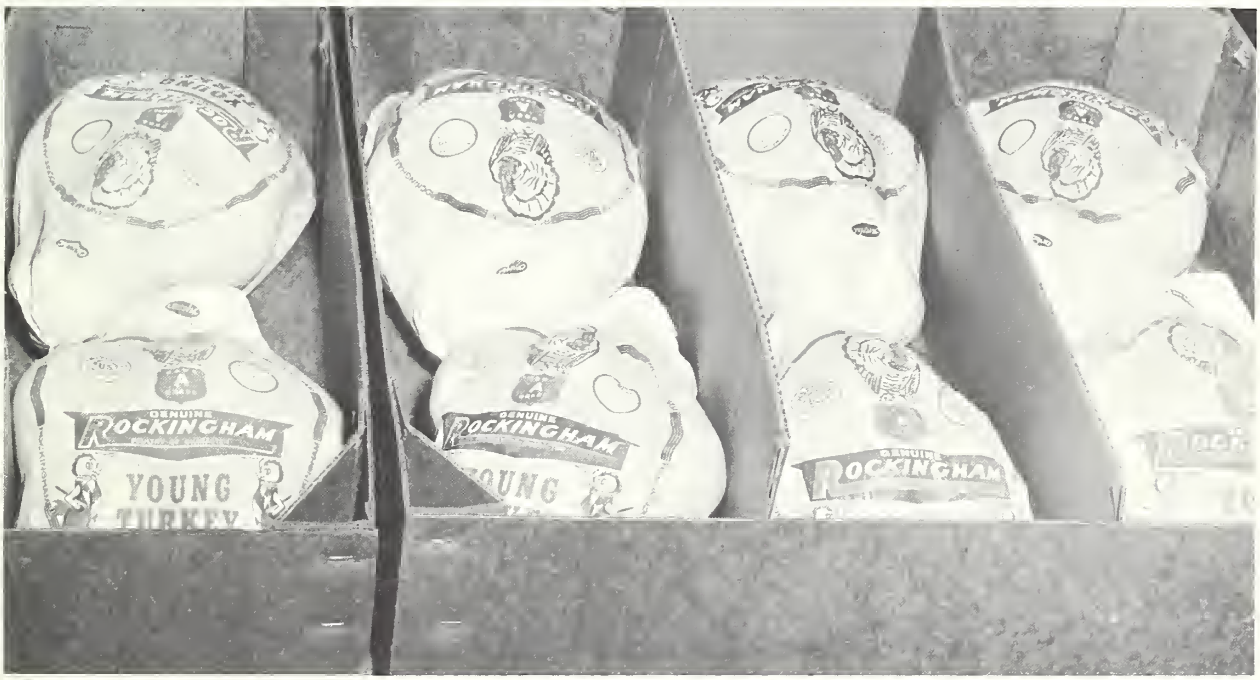
In 1961, when broiler prices were at a record low, losses averaged 6.4 cents a bird or 17 cents per dollar of contract feed.

Association E had its first full year of contract operation in 1957 with about 1 million birds. The program was expanded in 1958 to 10 million and then placements were reduced in 1959 to about 6.4 million birds, followed by a further reduction to about 3.1 million in 1960. Placements were increased to 4.6 million birds in 1961 and to 8.2 million in 1962. Contract feed reached a peak of $5.5 million in 1958; dropped to about $3.5 million in 1959 and to $1.4 million in 1960. It increased in 1961 to $2.3 million and to $3.3 million in 1962.

Contract feed went from 6 percent of total feed sales in 1957 to 25 percent in 1958 and was down to 11 percent in 1961. Average number of birds per contract increased from 10,000 to 13,257 during the period. By 1962, this average was 11,054 birds.

In 1957, 1959, and 1960, contract production losses were 5 to 6 cents per dollar of feed. They were only 0.5 cent a bird in 1958. Then in 1961, they jumped to 14 cents--equivalent to 30 percent on contract feed volume.

Association F began broiler contracting in the fall of 1957 but did not maintain detailed and separate records on production



Rockingham Poultry Cooperative, Broadway, Va., integrates its production, processing, and marketing with production supply services of Rockingham Farm Bureau, Inc., to assure its membership an outlet for poultry products. The Rockingham label is known throughout the world, wherever U.S. poultry is sold.

operations. The association had 7.7 million birds under contract in 1960 and 9.5 million in 1961. There were about 7,700 and 9,500 birds per contract for the 2 years, respectively. Contract feed was valued at about $4.3 million in 1960 and $3.5 million in 1961, and accounted for 61 percent and 44 percent of all feed sales in the 2 respective years.

Contract production losses were only 0.5 cent a bird in 1960 but increased to 7.4 cents, or about 20 percent on contract feed volume in 1961.

Composite Analysis

Total feed sales for five cooperatives for which comparable data were available rose from $68.8 million in 1956 to $115.3 million in 1959 but had declined to $82.5 million by 1962.

Broiler feed contract volume increased 120 percent from 1956 to 1962 while total feed volume increased in value only 20 percent (table 4). This indicates that other types of feed actually declined from 1956 levels.

Contract feed reached a high of $44.9 million in 1959, or 39 percent of total feed sales compared with 19 percent in 1956. It declined $16.5 million or over one-third in 1960, then increased in 1961 to 33 percent of total feed sales and in 1962 to 37 percent.

Because of reduced overall margins in financed broiler production in 1959, the number of broilers produced under contracts declined 23 percent the next year. Then, with an early broiler market recovery in 1961, production exceeded the previous year's level and contract feed increased 8 percent. However, the price advance as of short duration and U.S. average farm broiler prices declined to a record annual low of 13.9 cents a pound in 1961.

Seasonal peak credit loads in poultry feed contracting had a direct bearing on a particular association's comparative production advantages. Wide fluctuations occurred in areas with severe weather, such as the Northeast, where peak credit loads in some instances ran as high as 57 percent of annual totals. The interior regions of the South enjoyed a minimum seasonal variation; peak credit loads for the same period were only 11 percent of the annual total sales.

The average number of flocks of individual growers during the period under study showed a significant yearly increase. In 1956, the ratio of number of flocks to growers was 3 to 1. During 1961 this ratio had increased to an average of 3.9 flocks for each grower under contract.

Generally, the number of flocks grown under contracts also represented the number of contracts in force for a given year. Some variation between total

Table 4.--Consolidated yearly broiler feed operations and total feed sales, 5 selected cooperatives, 1956 to 1962

Item	Total feed sales and contract volume						
	1956	1957	1958	1959	1960	1961	1962
				$1,000			
Total feed sales	$68,800	$83,400	$100,900	$115,300	$93,500	$94,200	$82,460
Contract volume	12,990	25,276	34,849	44,887	28,352	30,648	30,463
				Percent			
Contract volume as percent of total feed sales	19	30	35	39	30	33	37

Item	1956	1957	1958	1959	1960	1961
			$1,000			
Total contract production costs	$22,358	$40,578	$54,271	$69,590	$52,563	$48,418
Less receipts	21,234	38,508	52,691	61,829	50,455	43,472
Contract settlement costs	1,124	2,070	1,580	7,761	2,108	4,946

flock settlements and total contract number occurred prior to 1959, but with frequent contract revisions due to lower broiler prices, flock settlements and total contracts in force during a business year have been about equal since 1959.

Definitions of Terms.--Before discussing the combined feed contract financing operations of the cooperatives, we shall define the terms used in our analysis.

1. Regular production costs include cooperative's contract credit advances to growers for production supplies such as feed, chicks, litter, and the like. They are gross costs for producing birds ready for market, before deducting net margins on feed manufacturing and on other supplies provided for the contract programs.

2. Contract settlement costs include cooperative's incentive payments to growers based on efficiency factors such as feed conversion. These payments went into effect only when receipts from broiler sales failed to yield predetermined minimum returns to growers.

3. Total contract production costs include regular production costs plus contract settlement costs.

4. Contract production gains or losses represent the difference between a cooperative's total contract production costs and its sales receipts from live broilers, before taking into account net margins on feed manufacturing and miscellaneous supply items provided for the broiler contracting programs.

Total Contract Production Costs.--Aggregate figures of five regional cooperatives for which an uninterrupted series of data were available showed that total contract production costs exceeded receipts from broiler sales each year. As mentioned, such figures did not reflect any offsetting gains in other phases of a vertically integrated program and, therefore, should not be construed as net losses on the entire broiler contracting program.

The above tabulation shows combined contract production costs, annual receipts, and contract settlement costs for each year, 1956 through 1961, for five regional cooperatives.

Expansion of the entire broiler industry has been accelerated during the past decade by nearly completely integrated contract growing programs.

To indicate the cooperatives' rate of growth in the broiler industry, the five associations' total contract production costs were compared with the United States gross broiler farm income for 6 years. The cooperatives' total contract production costs, which exceeded receipts from broiler sales, were used because these costs represented the gross income of the participating broiler growers under the contractual programs of the five cooperatives.

Item	1956	1957	1958	1959	1960	1961
			Million			
Gross broiler farm income, United States[1]	$838	$886	$1,002	$925	$1,015	$947
5 cooperatives' contract production costs	22	41	54	70	53	48
			Percent			
5 cooperatives' share of U.S. total	2.6	4.6	5.4	7.6	5.2	5.0

[1]U.S. Department of Agriculture. Egg and Poultry Statistics through Mid-1961. Econ. Res. Serv., Statis. Rptg. Serv., Agr. Mktg Serv., Statis. Bul. 305, March 1962.

From 1956 through 1959 the cooperatives' rate of expansion was more rapid than the total broiler industry's growth as shown by above tabulation. By 1959 the five cooperatives' total broiler operations represented more than 7 percent of the entire industry, while in 1956 the percentage was less than 3.

Following the low broiler prices in 1959, the cooperatives' share the next 2 years dropped to around 5 percent (less than 1958 levels) and they were forced to revise their contract settlement provisions. As a result, cooperatives lost a number of growers but they made every effort to retain the more efficient ones.

One of the large integrated cooperatives, however, increased its broiler production by more than 6.5 million birds annually during the 1956 to 1961 period. It increased the number of birds by 377 percent and contracts by 177 percent, thus indicating that it carefully selected its contract growers.

The annual U.S. weighted average price of live broilers showed a downward trend from 19.6 cents a pound in 1956 to a low of 13.9 cents in 1961. While prices declined 30 percent during this period, cooperatives' regular production costs increased 169 percent and their contract settlement costs increased 340 percent. Had contracts not been adjusted as broiler prices declined, these contract settlement costs would have forced some associations completely out of the broiler production business.

Other types of firms which failed to recognize the need for immediate contract adjustments also suffered losses which forced liquidation through mergers or complete withdrawal from broiler contracting.

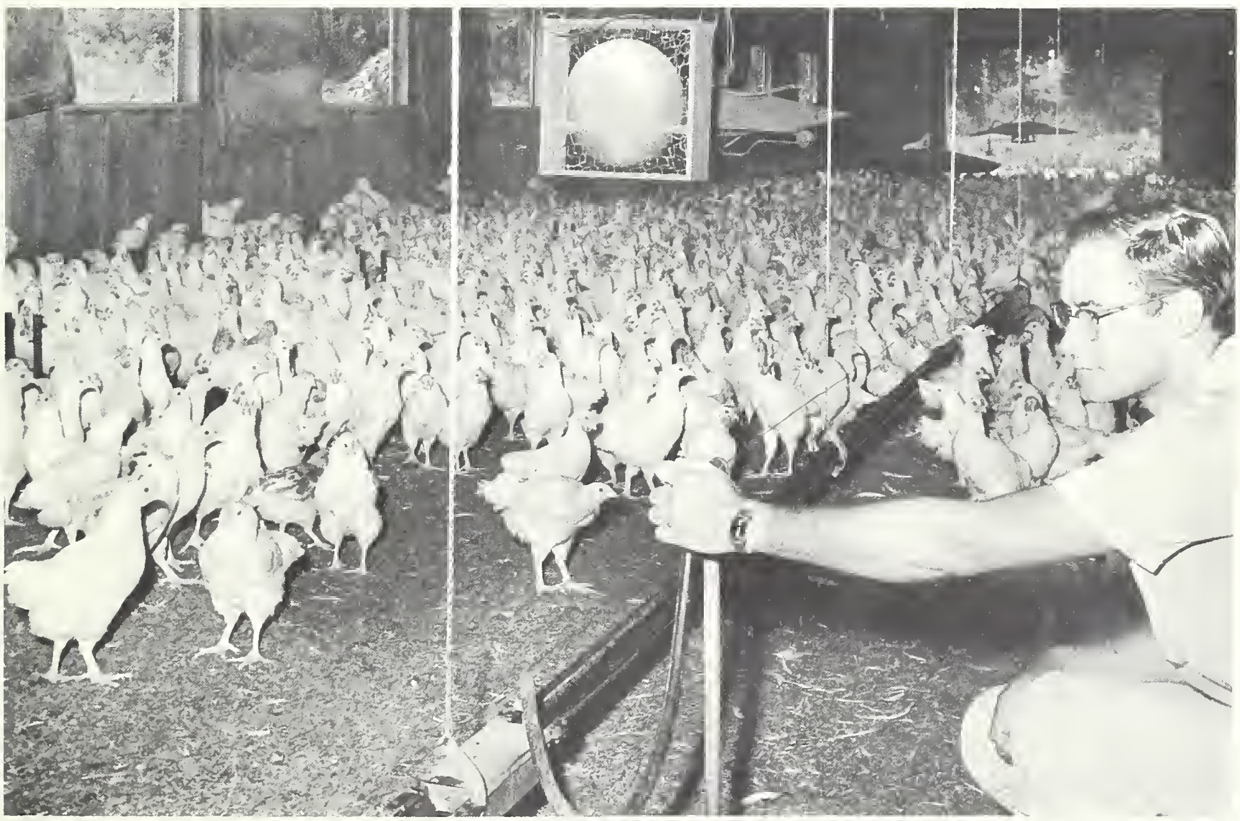
As mentioned, data were not obtained on the frequent and detailed adjustments cooperatives have made in their contracts. However, comments on the general trend of these adjustments are included in the General Observations section at the end of this report.

Production Losses.--A wide range in contract production losses per dollar of feed volume and per bird occurred among the cooperatives studied. Table 5 shows annual ranges in operating results and in flock size.

The largest association had the greatest loss in 1959--8.8 cents a bird, while the second largest association sustained the smallest loss--1.3 cents. Both associations increased production levels from 1956 through 1959. Then the largest association sharply curtailed production in 1960 while the second largest continued its previous rate of

Table 5.--Range in contract production losses and average size of broiler flocks, 5 associations, 1956 to 1961

Association range	Contract production losses and size of flocks, by year					
	1956	1957	1958	1959	1960	1961
	Cents loss per dollar of contract feed volume					
Low	2.8	1.3	1.0	5.2	0.8	5.6
High	10.0	9.2	15.4	22.4	16.3	30.1
	Cents loss per bird financed					
Low	0.5	0.6	0.2	1.3	0.7	2.2
High	6.7	5.0	6.3	8.8	6.6	14.0
	Number of birds in average flock					
Low	4,074	4,483	4,386	5,551	6,251	6,305
High	10,000	10,000	10,000	10,733	7,769	13,257



Sound flock management, combined with modern feed formulation and flock care, reduces production costs for contract broiler producers.

increase. The amount of production costs charged growers under the respective contract provisions appeared to be one of the major causes for this difference.

Increased Efficiency.--Efficiencies in feed conversion due to genetics and disease preventive measures as well as improvements in feed manufacturing and distribution have occurred during the period under study.

In an effort to indicate this increased efficiency on an aggregate basis, we have compared five cooperatives' total contract production costs per pound for each year from 1956 through 1961, using the first year's unit production cost as a base (table 6). The percentage change from the base year was credited to efficiency gains. This does not purport to be an accurate measure but it is an indicator of the relative gains that can be realized through handling efficiencies.

Average broiler production costs for the five cooperatives dropped steadily from 20.64 cents a pound in 1956 to 15.48 cents a pound in 1961. This represented a change of 25 percent which, for purposes of comparison here, we attribute to efficiency gains.

If the U.S. average broiler price had continued at the 1956 level of 19.6 cents a pound live weight, then by 1961 efficiency gains would have meant increased savings for the five cooperatives' broiler programs of about 25 percent or $1.6 million.

Stated another way, efficiency gains should be credited with cutting their total contract settlement costs about 25 percent. Without these gains, broiler losses would have been $1.6 million greater in 1961.

The tabulation shown below gives a breakdown, by item, of production costs of one cooperative in 1959-60.

The three major categories of production costs are feed, chicks, and contract settlement. These three represented over 95 percent of total production costs in 1959-60 for the example given. Feed costs, including delivery, averaged 10 cents a pound and were over 63 percent; chick costs totaled 21 percent; and contract settlement costs totaled about 11 percent of total production costs. Efficiencies in feed handling, chick procurement, and contract adjustments have reduced these costs by nearly 25 percent from 1956 levels.

Considerable seasonal and regional variations occur with fuel and litter costs. These two items are basic in broiler production, yet some associations' contracts make no allowance for them. Other contracts make seasonally adjusted allowances which reduce out-of-pocket costs for the grower during the production cycle.

Supervision or fieldman cost varies with a particular area's production intensity and with the degree of control an association has

Item	Amount per pound	Percent of total
Hatching eggs	$0.0263	16.7
Hatching operations	.0069	4.4
Feed ingredients	.0930	58.9
Feed milling	.0050	3.2
Feed delivery	.0020	1.3
Medicine	.0027	1.7
Fuel and litter	.0004	0.2
Interest and insurance	.0015	1.0
Fieldman	.0027	1.7
Contract settlement costs	.0173	10.9
Total costs	0.1578	100.0

Table 6.--Efficiency gains in feed conversion, as indicated by comparison of 5 cooperatives' average broiler costs with U.S. average price, 1956 to 1961

Item	Average costs and efficiency gains, by years					
	1956	1957	1958	1959	1960	1961
	Cents per pound					
U.S. weighted annual average broiler price	19.60	18.90	18.50	16.10	16.90	13.90
5 cooperatives' average broiler cost	20.64	19.91	19.05	18.12	17.61	15.48
	Efficiency gains for 5 cooperatives					
Percent change from 1956	Base	+4	+8	+12	+15	+25
	$1,000					
Estimated gain	Base	$128	$453	$968	$905	$1,615

over broilers under contract. In some respects, supervision and medicine cost levels will follow the same pattern. Any major producing area which has had disease problems from previous production will be increasingly more vulnerable to future disease losses.

As more associations acquire their own hatcheries, modernize feed handling facilities, increase the proportion of risk borne by the grower, and maintain control of the processed product as long as practical, overall unit costs should decline and permit satisfactory net margins. If it is economically sound and desirable, such an integrated program should efficiently convert feed grains into animal products.

Secured Plans for Broilers

Providing credit for independent broiler producers is not a new service for cooperatives engaged in feed merchandising.

Thirty-day open account credit was the first financial assistance given. Then, as the broiler industry expanded and risks increased, cooperatives found that a different type of program was needed. They developed longer term production financing programs with security taken to protect them. Open account credit, however, has not been eliminated; and members still use it for purchases not obtained under secured financing programs.

Associations H and I offered secured financing programs for broiler producers.

Principal provisions of these plans will be discussed under the following headings: Selection of growers, method and extent of financing, security and finance charges, repayment schedule, and association's experiences.

Selection of Growers

Criteria for selecting growers to receive financial assistance in broiler production differed to some extent in each association.

Association H, for example, selected growers on the basis of credit considerations, type and quantity of feed required, and size of investment the cooperative would have to make in the operation. Since this association was seeking to build feed volume by financing growers, accounts that required all mixed feeds were more attractive than those using grain supplements.

Day-old chicks off to a good start. Nine weeks later these broilers will be ready for Sunday dinners. Modern feed conversion continually speeds growing time--helping to reduce financial hazards for producers.

Method and Extent of Financing

Credit to broiler growers can easily be overextended. Therefore, suppliers must be alert and exercise caution especially during periods of depressed and declining prices.

This situation also places growers in an unfavorable financial position before starting a new flock. Quite often they fail to qualify for additional credit and are forced out of production, thereby reducing prospects for repaying delinquent accounts.

Broiler producers who require financial assistance for feed purchases often require additional assistance for other production items. This assistance may be cash advances for purchase of baby chicks from hatcheries not owned by the cooperative, a line of credit for feed to be drawn upon as needed, or additional credit for purchasing other supplies.

Association H made cash advances for the purchase of baby chicks if definite savings would be realized and if the grower did not have sufficient cash to take advantage of the savings. This advancement was paid direct to the hatchery at time of delivery of chicks and became a part of the grower's regular account.

This association established a limit for total purchases (including feed costs and cash advances) of 60 cents a bird. Credit was extended for a period of 10 weeks from date of hatch and in no case was permitted to exceed this limit. Other broiler supplies were sold on a 30-day unsecured basis.

Association I financed producers by using secured loans to establish a line of credit.

These loans were extended for the amount needed to produce a flock of broilers and producers used them as needed. This association did not have a predetermined limit applicable to all growers; each grower was considered individually. The association believed this procedure was better suited to its program.

Security and Finance Charges

Association officials stated that credit extended for production purposes should have adequate security to cover the entire account, and also collection costs if foreclosure became necessary. Without such security, broiler production credit is doubtful from the time of initial delivery of supplies.

Association H required growers to give a chattel mortgage and a promissory note bearing interest at 0.5 of 1 percent a month for 10 weeks and 1 percent a month thereafter. It made a charge of $4 for each 1,000 chicks to cover financing services and chick advances. In addition, the association charged $2.50 to cover mortgage preparation, filing, and release fees.

Broiler production loans in Association I were secured by a first chattel mortgage with interest at 6 percent for the time money was actually in use.

Repayment Schedule

A repayment schedule should be established and understood by all parties before credit is extended. After a schedule is set up, every effort should be made to keep payments in accordance with it.

Association H developed a repayment schedule with a definite due date at the time credit was extended. It policed accounts regularly and made every attempt to keep them on a current basis. Growers were required to pay accounts in full from broilers proceeds before final settlement was made.

Broiler production loans made by Association I were on a flat-fee basis. These loans were due and payable upon sale of birds.

Association's Experiences

Association H did not maintain records of its broiler financing experience that were comparable to those of other associations.

The broiler program of Association I has been successful and continues to expand. The number of birds increased from 490,000 in 1956 to about 1.6 million in 1960, (the latest year for which figures are available) and the number of accounts increased from 39 to 135 (table 7).

Table 7.--Broiler feed secured financing experience of Association I, 1956 to 1960

Item	Secured financing, by years				
	1956	1957	1958	1959	1960
			$1,000		
Total feed sales	$22,000	$21,000	$22,100	$24,310	$22,600
Feed financed	80	118	507	710	780
			Number		
Accounts	39	60	105	120	135
Birds	490,000	960,000	920,000	1,470,000	1,610,000

The value of financed broiler feed volume increased from $80,000 in 1956 to $780,000 in 1960. The association did not experience any loss during this period.

This association financed broiler producers primarily to increase volume; therefore, loans were extended only to the best growers. The association had no program for sharing profits or losses with growers. Growers were responsible for repaying their loans regardless of the financial outcome of their flock.

This plan simply attempts to reduce risks on the normal accounts receivables since credit needs of growers are unusually high and exceed regular open-account credit policies.

Turkey Feed Financing

This section of the report covers the contract financing plan that one association used and the secured financing programs that four cooperatives used to finance members' turkey production (table 1). Feed was the major item financed.

Most cooperatives have been hesitant about inaugurating extensive financing programs for turkeys. This might be explained, in part, by the extended growing period necessary to produce a marketable bird compared to the shorter period required for broilers.

Capital requirements also are much greater for turkey production than for other types of poultry, and feed suppliers have less opportunity to increase or decrease production than they have with broilers. Therefore, they cannot exercise as much control over capital used as is possible in broiler production.

Contract Plan for Turkeys

Only Association D in this study had a contract financing program for turkeys. This

Beltsville Whites on range. Efficient year-round turkey production has encouraged consumption of turkey meat and helped to stabilize market receipts for co-op producers.

production program was started in 1956 and was conducted through local cooperatives.

Grower Application

An application for turkey feeding was required from any producer desiring to produce turkeys under contract.

Affiliated local associations used these applications to obtain detailed information on producers and their housing facilities. The locals investigated each prospective grower and forwarded a report with the grower's application to the regional association for approval at least 3 weeks before poults were to be placed.

If local associations placed poults in growers' houses before approval was received from the regional, they were not accepted in the program until the growers were approved.

Local-Regional Cooperative Agreement

Association D financed the local associations and they in turn contracted with growers. Local associations entered into agreements with the regional for protection against any losses incurred and for reimbursement of the incentive payments they made to producers.

Locals agreed to pay the regional a specified amount for each poult started, based upon age of the flock when sold, as follows:

Age of flock	Cents per poult
Up to and including 18 weeks	5
18 weeks and 1 day to 19 weeks, inclusive	6
19 weeks and 1 day to 20 weeks, inclusive	7
20 weeks and 1 day to 21 weeks, inclusive	8
21 weeks and 1 day to 22 weeks, inclusive	9
Over 22 weeks	10

These payments were made regardless of whether the flock was sold at a profit or loss, or lived to marketable maturity. If proceeds from the sale of any flock were less than the account with the local, the regional agreed to bear such loss, except as otherwise provided.

If a loss occurred in the production and sale of a flock because of mortality, low prices, or other production factors, the local associations agreed to credit against such loss a specified amount per ton of feed used in raising that flock to marketable turkeys. This was computed as follows:

Gross loss per 1,000 poults started	Credit per ton of feed
$0 to $49.99	$4
50 to 99.99	6
100 to 149.99	8
150 and over	9

The agreement also provided that proceeds from sale of the flock, after payment of all production costs, were to be divided 75 percent to producer and 25 percent to local cooperative.

Local Association Responsibilities

Local associations agreed that their representatives would exercise reasonable care in investigating and selecting growers, visit each flock under contract at least once a week, advise the producer on improvements needed, and see that necessary corrections were made. These representatives reported weekly to the regional association on the condition of the flocks.

Locals also agreed to see that current recommendations for feeding and management were followed. They further agreed to supply only those medicinal and sanitation supplies recommended by State agricultural experiment stations and/or approved by the regional association.

The locals kept records and accounts on each flock, including final inventory of feed and supplies, and maintained these records for inspection by the regional. All unused feed and supplies charged against a flock were credited to the locals' accounts, and locals and producers made arrangements for payment or disposal.

Failure on the part of a local to observe requirements gave the regional the right to cancel its agreement with the particular grower or account involved.

Grower Responsibilities

The contract feeding agreement between growers and locals set forth conditions under which turkeys were grown. This agreement specified that the local would furnish and the producer would buy, at regular retail prices in effect on the date of delivery, all poults required in his commercial turkey operation and the feed, fuel, litter, and sanitation supplies necessary for raising poults to marketable turkeys.

The producer furnished all land, buildings, equipment, labor, and facilities necessary for growing turkeys. He agreed to follow all recommendations of the local with regard to feeding and management practices.

Consent to Sell

Flocks could not be sold until producer and local agreed upon the time of sale and buyer. In the event the buyer of any flock failed to make full payment of agreed sales price, the local was not responsible to the producer for any gains.

If a local sold to an unapproved buyer who failed to make full payment of an agreed price, the regional was not responsible for resulting losses.

In the absence of negligence on the part of a local, any loss that occurred as a result of a buyer's failure to make full payment of agreed price was borne on a 50-50 basis by the regional and the local association. This loss was the amount that remained after deducting local's total margins, less customary allowance for delivery and credit, on all poults and supplies used in producing the flock.

Production Loss Liabilities

Local associations remained liable to the regional for any losses resulting from their failure to acquire and record a valid conditional sales contract covering all poults, feed, fuel, litter, and sanitation supplies advanced to producers under the turkey contract program.

In event of a loss of, or on, any flock grown under agreement, the producer was relieved from all liability for such loss or deficit due to mortality, low prices, or other production factors. However, if the producer sold any flock without consent and approval of the local, he remained fully liable for the purchase price of all poults and supplies used in producing the flock.

If a flock was sold at a loss, any incentive payment due the producer was borne 25 percent by the local and 75 percent by the regional association. Where the producer's share of profit was insufficient to cover the incentive payment due him, the excess amount was shared 25 percent by local and 75 percent by regional.

The producer authorized that patronage refunds on his turkey production supplies for each contract year be applied against all losses sustained on flocks grown during that year. Any refunds over and above losses were returned to the producer. Incentive payments to the producer were considered as production expenses in this computation.

Incentive Payments and Final Settlements

Regardless of whether sale of a flock resulted in a gain or loss, the locals guaranteed producers an incentive payment. This

payment was deducted from the producer's share of proceeds from the flock. Incentive payments were calculated thus:

1. On flocks sold when 18 weeks of age or less, payment was $2 per 1,000 poults started times each one-hundredth of one point that the feed conversion factor was less than 3.75.

2. On flocks sold when more than 18 weeks but less than 21 weeks and 1 day of age, it was $2 per 1,000 poults started times each one-hundredth of one point that the feed conversion factor was less than 4.

3. On flocks sold when over 21 weeks of age, incentive payment was $2 per 1,000 poults started times each one-hundredth of one point that the feed conversion factor was less than 4.25.

Security Instruments and Contract Period

Growers furnished local associations a conditional sales contract covering all poults, feed, fuel, litter, and sanitation supplies advanced under the contract. The contract year ran from July 1 to June 30 or any shorter period applicable under terms of the agreement.

Association's Experience

The association's turkey contracting experience for the 7 years, 1956 through 1962, was quite similar to its broiler contracting for the same period.

For the first 4 years the association increased contract production over the preceding year but at a decreasing rate. After its first substantial loss in 1959, the association decreased turkey contracting by 14 percent in 1960. The cutback was insufficient to avoid production losses, however, as live turkey prices continued to decline during the year. This resulted in the greatest annual total production loss for the 7-year period.

Unit losses in 1962 exceeded the 1960 figure, but the decreased contracting volume in 1962 reduced total losses by over one-half.

Unit production losses and gains per turkey and number of birds under contract for each of the 7 years were:

Year	Cents gain or loss per bird	Number of birds
1956	+36	700,000
1957	+24	1,180,000
1958	+17	1,331,000
1959	-3	2,410,000
1960	-30	2,073,000
1961	+18	970,000
1962	-33	908,000

These figures reflect actual cash gains or losses including feed manufacturing margins as well as margins realized on distribution of production supplies to contract growers by the cooperative.

During the 7 years that contracting has been in force, the average flock size has remained fairly constant at about 4,500 turkeys per contract. This would indicate that the association has exercised considerable selectivity based on individual growers' previous performance.

Secured Plans for Turkeys

Because of the extended growing period for producing marketable turkeys, considerable operating capital is required for several months. Four associations--E, H, I, and J--financed turkey producers that met requirements for extended credit.

These associations' plans are discussed under the following headings: Selection of growers, method and extent of financing, security and finance charges, repayment schedule, and associations' financing experience.

Selection of Growers

If cooperatives are to finance turkey producers, they need some assurance that these producers are capable of repaying the credit extended under any foreseeable circumstances.

Most associations required an application for credit that included a financial statement and a listing of facilities and equipment to be used in the operation. Association E selected growers for its turkey financing program on the basis of credit history and ability to repay. Consideration was given previous successful turkey production, size of operations, and how they could help build feed volume.

Growers accepted in Association H's program were required to have a minimum of 10,000 birds and enough acreage to free-range birds and provide for frequent location changes of feed hoppers. Other requirements included adequate brooding and shelter facilities located reasonably near a feed supply and processing plant and successful turkey producing experience.

The association preferred that growers have sufficient equity in their land and buildings to obtain a loan with payments to fit their average yearly income. It preferred that equipment be paid for or financed in such a way that indebtedness could not become a lien on turkey returns or interfere with the operation in any way.

Association H also wanted growers to have a cash reserve sufficient to cover poult costs, labor, and other operating expense, including fuel and shelter, up to market time. If such a reserve did not exist, growers were expected to obtain a source of credit that would not become a lien on the turkeys.

The criteria Association I used for selecting growers to receive turkey financing were essentially the same as those used in selecting broiler growers. Being primarily interested in moving feed, it gave much attention to the size of operation and feeding program. A grower who used complete feeds was preferred to one who used only concentrates or operated a somewhat restricted program.

Even though this association was concerned with volume, it did not sacrifice sound judgment or take unnecessary risks. Growers had to be good credit risks, have a favorable credit history, and be financially sound to qualify for this program.

The credit application of Association J included a financial statement and bank and credit references. Growers specified the number, age, and breed of birds to be financed and prepared a proposed feeding program indicating approximate quantity and cost of feed to be used. They also indicated the quantity of feed grains they would furnish and the amount to be financed.

Growers gave a resume of their turkey production experience and a detailed history of their previous year's flock. They were required to have adequate housing, equipment, and range facilities to care for the flock properly.

An approximate marketing date was determined and a dressing plant designated at the time credit was approved. Growers agreed to insure flocks, follow the association's feeding program, and accept service and follow recommendations of fieldmen that inspected the flocks.

Method and Extent of Financing

Heavy losses can occur as a result of price declines between placement and marketing of turkeys because of the extended growing period. This makes it necessary for a lending agency to carry a producer for another flock or to liquidate its collateral.

Association E extended secured credit for production supplies and established a maximum amount for each account approved. It did not have uniform limits applicable to all growers because requirements varied with feeding programs used. Some growers

Sound flock management, with modern feeds reducing disease hazards, has enabled many producers to qualify for extended credit from their production supply cooperatives.

used homegrown grains while others purchased their entire feed requirements.

If poults were paid for and grower had sufficient assets, Association H made advances for operating costs equal to 50 percent of poult costs. If poults were not paid for and were in a position second to the association's mortgage, it made an advance of not to exceed 25 cents a bird.

The association extended credit up to 100 percent of the feed requirements for turkeys that were to be marketed in accordance with a predetermined schedule. Such credit was extended for a period of 23 to 26 weeks depending upon breed of birds being produced.

To finance its turkey producers, Association I extended secured production loans under an established line of credit for the amount needed to produce a flock. It charged producers' purchases against their cash balances as deliveries were made.

The amount of each loan depended upon the individual grower and the feeding program he proposed. Growers who demonstrated their ability as good producers and proposed to use complete mixed feeds received maximum loans. During the life of the loan, full patronage of the producer was mandatory and his right to withdraw was waived.

Association J considered each grower individually. It based approval of his account and determined the maximum credit to be extended upon conditions that existed at the time application was made and action taken. This association did not have uniform limits applicable to all growers.

Security and Finance Charges

All associations extending credit to turkey producers made a charge for this service.

Growers gave Association E security consisting of a mortgage with interest at 6 percent a year and insurance on turkeys and supplies payable to association. This association also had the right to possess birds and supplies at any time a grower failed to give them proper care and attention.

Association H required a first chattel mortgage and a promissory note as security for turkey accounts. The note had one-half of 1 percent monthly service charge until due and a 1 percent monthly charge thereafter until paid. The association charged $2.50 to cover mortgage preparation, filing, and release fees. Growers who received cash advances paid a service charge of 1 percent a month on outstanding balances.

In Association I, growers gave first chattel mortgages that bore 6 percent interest for the time the money was in use.

Requirements of Association J called for a chattel mortgage signed by grower and spouse. In addition, growers were required to sign notes covering each delivery of supplies. The interest rate for these notes was 6 percent per annum for the time money was used. This association also retained the right to enter a grower's premises at any time to inspect the flock and to cancel credit in whole or in part.

Repayment Schedules

Turkey growers financed by Association E authorized it to act as their agent and determine when birds were ready for market, to whom they were to be sold, and the selling price.

Proceeds were paid directly to the association and applied to the grower's account until his indebtedness was paid. If proceeds were insufficient to clear the account, the grower made arrangements to pay the balance. Growers also authorized patronage refunds on turkey production supplies to be applied to their accounts when turkey proceeds were insufficient for full payment.

Association H required that payment of turkey accounts be made concurrently with sale of birds. If turkeys were marketed through the association, growers authorized it to retain sufficient proceeds to cover their accounts. If birds were marketed through outside sources, growers were required to have checks made jointly to them and the associations.

In Association I, turkey production loans were made on a flat basis and were payable upon sale of birds.

All turkey accounts of Association J were payable upon sale of birds. Growers could market at any time and to any buyer they chose, but checks had to be made payable jointly to the association. Proceeds were applied to growers' accounts and amounts in excess of their indebtedness were paid to them. In the event proceeds from sale of a flock were insufficient to cover a grower's account, he had to arrange to pay the balance.

Associations' Financing Experience

Table 8 compares the turkey financing experiences of Associations E, I, and J. Associations D and H did not maintain records on their turkey financing operations that were comparable to those of the other three associations.

Association E did only a small amount of turkey feed financing from 1958--its first full year--through 1960. The maximum value of feed under the program was $175,000 for 50,000 birds in 1959.

Turkey feed financing by Association I increased from about $400,000 in 1956 to almost $2 million in 1960 and to $3.4 million in 1962. It still accounted for only 11 percent of total feed sales.

Birds financed increased from 78,000 in 1956 to 1.3 million in 1960 and totaled 1 million in 1962. The number of birds financed per account rose from 1,660 to 8,494 in 1960. Data were not available in 1961. In 1962, the number of birds financed per account increased to 20,000.

Association J's financed turkey feed volume rose from $1.5 million in 1956 to $5

Table 8.--Turkey feed financing experience of 3 farmer cooperatives, 1956 to 1962[1]

Year	Turkey feed financing experiences of associations		
	E	I	J
	Value of financed turkey feed $1,000		
1956	(2)	$392	$1,505
1957	(2)	934	1,951
1958	$168	1,507	2,565
1959	175	1,800	3,833
1960	75	1,975	3,696
1961	0	(3)	5,006
1962	0	3,375	1,890
	Total feed sales $1,000		
1956	$10,000	$22,000	$10,600
1957	10,000	21,000	11,800
1958	15,700	22,100	14,900
1959	17,200	24,300	14,900
1960	18,100	22,600	14,300
1961	19,800	(3)	17,900
1962	20,995	31,000	16,700
	Financed turkey feed value as a percent of total feed sales		
1956	(2)	1.8	14.2
1957	(2)	4.4	16.5
1958	1.2	6.8	17.2
1959	1.0	7.4	25.7
1960	0.4	8.7	25.8
1961	0	(3)	27.9
1962	0	10.8	11.3
	Number of birds 1,000		
1956	(2)	78	525
1957	(2)	220	665
1958	42	915	897
1959	50	1,200	1,313
1960	25	1,325	1,295
1961	0	(3)	2,021
1962	0	1,000	1,263
	Number of accounts		
1956	(2)	47	162
1957	(2)	62	168
1958	7	111	192
1959	6	142	175
1960	3	156	179
1961	0	(3)	191
1962	0	50	179

See footnotes at end of table.

(Continued)

Table 8.--Turkey feed financing experience of 3 farmer cooperatives, 1956 to 1962[1] (continued)

Year	Turkey feed financing experiences of associations		
	E	I	J
	Birds financed per account		
1956	(2)	1,660	3,241
1957	(2)	3,548	3,958
1958	6,000	8,243	4,672
1959	8,333	8,451	7,503
1960	8,333	8,494	7,234
1961	0	(3)	10,581
1962	0	20,000	7,056

[1] Associations D and H did not maintain comparable records.
[2] First full year of contract operation was 1958.
[3] Data not available.

million in 1961. This accounted for 14 percent of total feed sales the first year and 28 percent in 1961. Number of birds financed went from 525,000 to about 2 million, and birds per account rose from 3,241 in 1956 to 10,851 in 1961.

Then in 1962, financed turkey feed dropped to $1.9 million, 11.3 percent of total feed sales. Number of birds and number of accounts were close to 1960 figures.

Two associations (E and I) reported no losses on their turkey feed financing.

Association J had increasing losses from 1957 through 1961. They were only 0.5 cent a bird, or 0.2 percent of feed volume in 1956 but by 1960 were up to 3.1 cents a bird, or 1.1 percent of feed volume. In 1961 losses increased to 11.5 cents a bird which was equivalent to 4.6 percent of financed feed volume.

In this type of financing, annual losses usually represented doubtful notes receivable or bad debts written off that year. In some cases these actually applied to financing operations of previous years. Thus, exact losses for each year finally are determined by future recoveries or collections of the amounts written off. Detailed information for such an analysis of broiler and turkey feed loans was not available for this study.

Financing helped Associations I and J maintain feed volume in recent years.

Feed Financing Trends and Problems

This section provides background information on the development of broiler and turkey feed financing. It also discusses some of the problems cooperatives have encountered in recent years in providing feed financing for their members.

Development of Feed Financing

Extended credit on broilers and turkeys is not new. Production credit was available from feed dealers during the 1920's.

During the World War II period, when poultry meats helped reduce wartime shortages, feed dealers used four general financing systems to promote poultry production. These were:

1. Cash.

2. Share, with feed dealer receiving one-fourth to one-third of the net proceeds.

3. Salary or hired labor.

4. Stove rental, with the feed supplier paying the producer an agreed rental per stove or per 1,000 chicks for his labor and the use of his houses and equipment. The supplier received all broiler sales receipts.

After the war, and especially during the past decade, many contract innovations were used to increase production and feed volume. Some feed dealers used a guaranteed price and a flat-fee arrangement to introduce broiler contracting in new areas and to differentiate their contract programs from those of competing integrators in established production areas.

Most guaranteed price arrangements were on a secured note basis with a specified price at market time guaranteed the grower. Even a "no-loss" clause was occasionally inserted to protect growers from excessive losses.

Dealers found that a guaranteed price arrangement with this amendment allowed growers too much latitude, however, and that losses often exceeded production supply margins. Greater control over flock management became necessary.

Thus, the flat-fee arrangement evolved where dealers retained title to all production supplies and growers received a fixed amount per pound of broiler produced. This arrangement gave dealers flock production control but it increased their costs until the plan proved economically unfeasible.

During the latter half of the past decade, contracts developed into three major systems:

1. Net-share contract.--The dealer furnishes feed, chicks, medicine, fuel, and other necessary production items; the grower furnishes broiler house, equipment, and necessary labor. Net proceeds are shared on a contracted basis after deducting charges for production items from sale receipts. Contracts may call for a "net-share" divided 90-10 (90 percent to the grower and 10 percent to the dealer); $87\frac{1}{2}$-$12\frac{1}{2}$; 80-20; 60-40; 50-50; or 38-62.

2. Net-share and feed conversion contract.--This type contract modifies the net-share arrangement so that the grower receives either an incentive payment or a share of net proceeds, whichever is more. Incentive payments are based on a production efficiency schedule stipulated in the contract. These payments are made regardless of whether a production loss occurs because of low market prices.

3. Graduated efficiency-incentive payment plan.--This plan is based on the prevailing market and prescribed feed consumption weight-gain ratios. No provision for sharing net proceeds with the grower is included. However, this system, like the other two cited, does not hold a grower liable for any loss due to low broiler market prices.

How Cooperatives Have Adjusted Programs

During these developments in financing, many firms moved to integrate their operations to further protect sources of production supplies and retain control of poultry up to or including its processing and marketing to retail outlets.

With heavy capital investments in plants, contracting firms continued to expand production to cover fixed costs. Sometimes losses resulted, but these were less than if heavy retrenchment had occurred.

Broilers just in from the farm being loaded on the conveyor line going into the poultry processing plant. This type activity is the end result of joint efforts of farmers and feed suppliers in broiler feed financing and production.

Reports from cooperatives in this study indicated that some firms with a completely integrated program and a regional comparative advantage have never incurred serious losses on their overall poultry operations.

Economic conditions have necessitated adjustments and numerous changes in contract provisions. These changes have been less favorable, at least on a short-run basis, to contracting producers, requiring them to assume more risks and thus share to a greater degree in resulting gains or losses.

The cooperatives generally have followed industry practices in their financing operations. They have had to tighten their contract and settlement provisions with producers in order to realize net margins or reduce losses resulting from lower price levels.

Experiences of two associations during the 1956 to 1961 period illustrate the evolving nature of broiler feed contract settlement provisions.

Association C had a "no cash loss" or "no producer liability for loss" arrangement and a no-guarantee return to producer, except as stipulated by an incentive feed conversion efficiency payment schedule.

The only change in settlement provisions Association C made during this 1956 to 1961 period involved a revised feed efficiency conversion schedule and a seasonally adjusted allowance for fuel and litter. Net returns were split on a 75-25 basis with 75 percent returned to the producer. This arrangement remains in force at the present time (1963).

Association D made many changes in its contract settlement provisions. At no time, though, was the producer held liable for losses due to low market prices. At first, net proceeds were split on a 90-10 basis with 90 percent returned to the producer. This basis was repeatedly amended as broiler prices declined, and current broiler contracts give the producer 38 percent of the net proceeds.

Feed efficiency conversion schedules also were tightened so that incentive payments were more realistic and reflected actual flock management efficiencies. The

association also amended its broiler contract provisions covering allowances for fuel, litter, and medicinal costs to eliminate inefficient use of these production items.

At the time of this study, the association had a contract with its growers which parallels in many respects, the contract objectives offered growers by Association C. Thus, Association D has experienced a nearly complete evolution in that growers now carry a continuously larger share of production-marketing risks, whereas they initially contracted on a no-risk and efficiency conversion payment basis amounting to almost a guaranteed minimum return.

These trends seem to indicate that a financing plan where growers share most of the risks is a more sound approach for cooperatives to follow in an industry faced with serious supply-price problems.

Some Specific Problems Encountered

In this section, we shall comment on a few of the specific problems the cooperatives in this study encountered in financing broiler and turkey feed. Most were common to other feed firms with similar operations.

Price-Cost Relationships

Prices for live broilers have declined as production has increased. In 1950, the U.S. average price was 27.4 cents a pound. During 1955, broilers averaged 25.2 cents a pound; in 1960, 16.9. By 1962 they averaged only 15.2 cents a pound (figure 1).

Furthermore, production costs have varied considerably according to regions. In 1957, when the U.S. average price was 18.9 cents, a study by the Maine Agricultural Experiment Station indicated production costs were 19.2 cents a pound in New England, 18.4 cents in the Delmarva Peninsula, and 17.5 cents in the Southeastern States.

According to this study, regional differences in costs per pound were due mainly to farm wage rates per hour, broiler chick prices, fuel costs, building and equipment costs, and weight of finished broiler.

Live-weight prices for turkeys also have declined--from an average of 32.9 cents a pound in 1950 to 30.2 cents in 1955 and 21.6 cents in 1962 (figure 2).

Rather wide and sudden fluctuations in broiler prices have occurred within a year's time. For example, the U.S. midmonth average price in June 1958 was 21.1 cents a pound; by December it had declined to 15.1 cents. In 1961, the February average price was 17.6 cents; 7 months later the price had dropped to an alltime low monthly average of 11.8 cents.

Prices often fluctuate after broiler chick placements. This presents serious problems for management, especially in periods of declining prices. When prices drop below production costs, associations depending solely or largely on feed manufacturing net margins are forced to reduce broiler placements. This further aggravates the margin squeeze by increasing per unit manufacturing costs on the remaining feed volume.

This general trend toward lower broiler prices combined with wide price fluctuations seems to pose some rather basic problems to cooperatives.

The underlying question is "Why engage in the turkey or broiler business?" Are the objectives one or more of the following:

1. To obtain certain net margins in turkey or broiler production.

2. To maintain a certain level of feed volume.

3. To balance feed and broiler or turkey margins to achieve certain overall net margins.

4. To provide competitive services.

Fig. 1 Broiler Production and Average Price Received By Producers, United States, 1950 to 1962, inclusive.

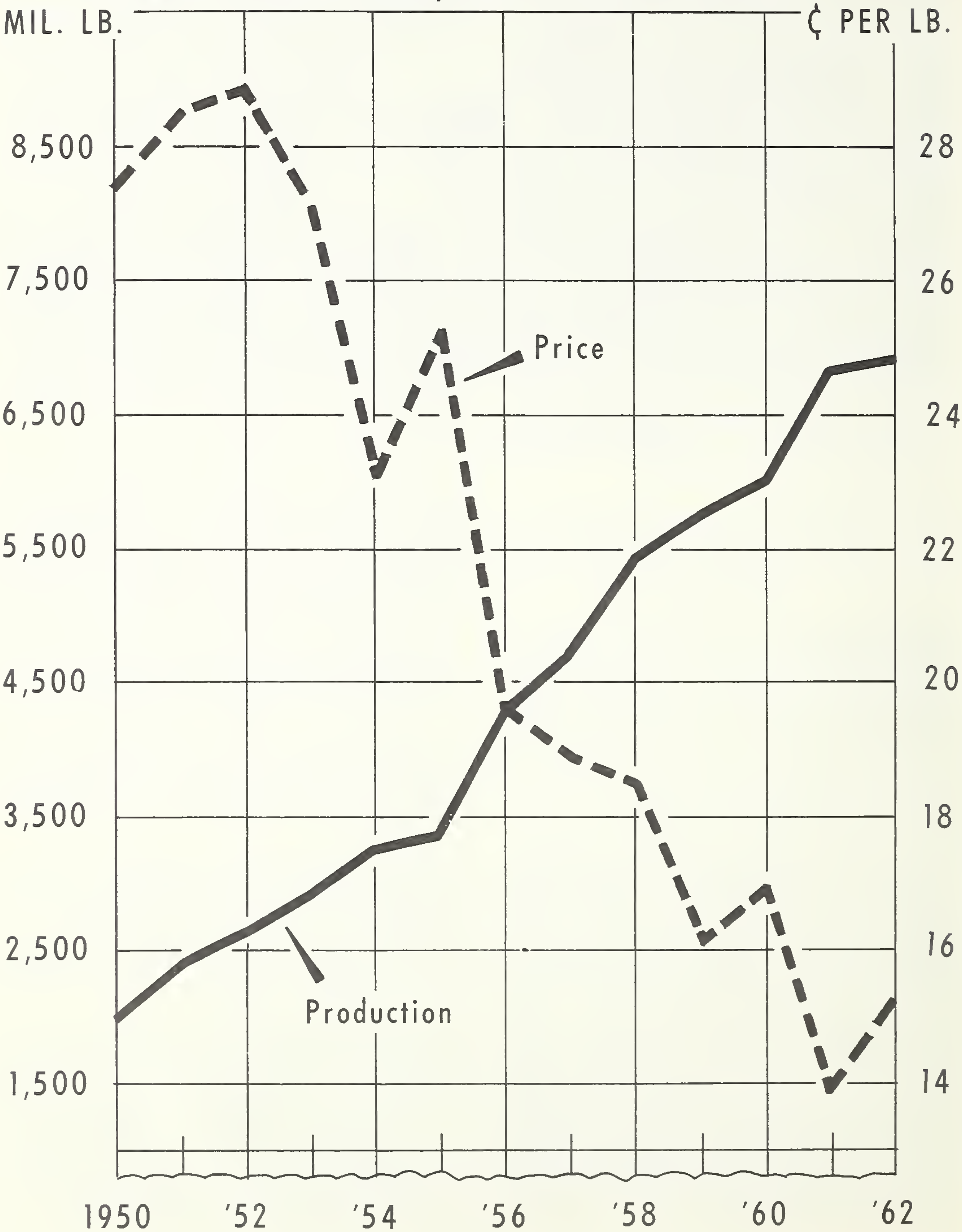
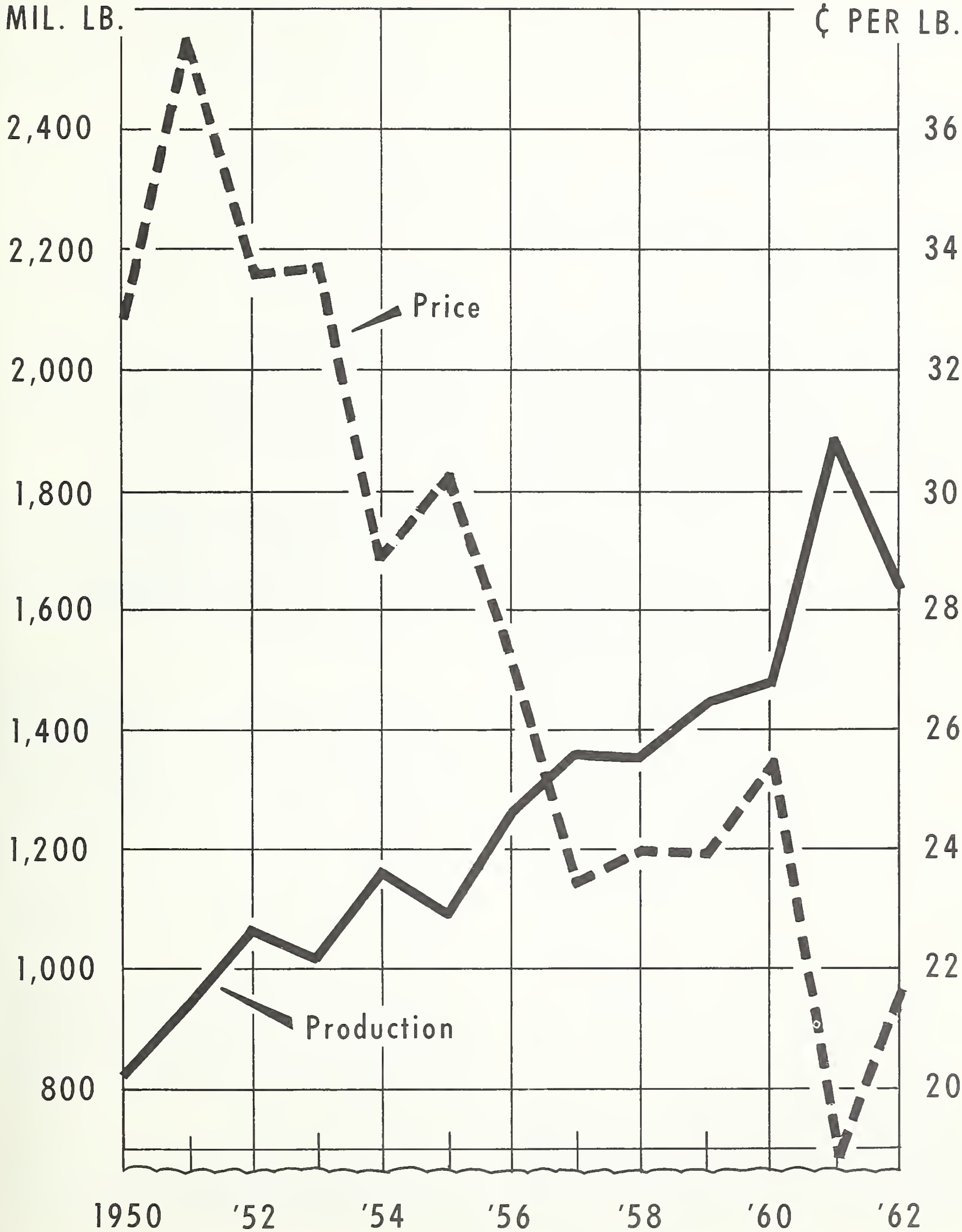


Fig. 2 Turkey Production and Average Price Received By Producers, United States, 1950 to 1962, inclusive.



Attention to these questions would help define the problems in terms of objectives. Once this is done, a cooperative can proceed with an analysis to determine whether or not it achieved, or can possibly achieve, its objective.

Risk Bearing and Equitable Treatment of Members

Because of their inherent nature, farmer cooperatives are faced with special problems in financing feed and other items used in contract farming programs.

Most local and regional cooperatives that finance feed for poultry operations have large memberships made up of farmers engaged in various types of farming. Broiler or turkey producers under contract comprise a small percentage of the total members and therefore exert relatively little voice in the overall policies of the associations.

The primary objectives of such cooperatives usually are to develop sufficient feed volume and to obtain a sufficient and steady supply of birds to achieve or maintain optimum efficiency in their feed mills and poultry processing plants. Thus, the benefits accrue to the entire membership.

When these associations contract with farmers to use their own facilities and labor to produce broilers or turkeys--especially on a fixed fee basis--this is a limited form of cooperative production or cooperative farming. The entire membership gains or loses from the results of this pooled operation.

Of course, results of other integrated operations such as chick hatching, farm supply purchasing, and poultry processing and selling determine final returns from the entire broiler or turkey enterprise.

The diversified membership may be willing for the cooperative to use a large amount of its assets and assume considerable risk in contracting with a few poultry producers if this reduces overall feed manufacturing costs. The membership also may be agreeable if the contracting operation breaks even or if returns cover only the added direct or variable costs. But if heavy losses occur, the situation may be different. Members do not like to use net margins from other types of feed and production supplies to cover such losses.

Thus, many diversified farm supply cooperatives believe that broiler and turkey contracting must at least carry its own average variable costs to justify its continuance. Farmers with one type of enterprise will not want to subsidize another group with a different enterprise for an extended period.

Cooperatives often may be at a disadvantage as compared with firms that may realize profits from one type of operation and not have to allocate them to the patrons providing the business.

Cooperatives also may be limited in the extent to which they can engage in contract operations because of corporate income tax aspects. Any losses from contracting reduce overall net margins and patronage refunds that might otherwise be realized on other supply or marketing operations.

An investor-type business might be willing to take such risks to gain or maintain volume because if losses are incurred they might be offset by positive effects of volume on overhead costs. Also, if losses are incurred, they could be carried forward in adjusting future income tax base. If net profits are realized, they might be subject to corporate Federal income taxes at higher rates than on the amounts exclusive of such profits.

The problem of risk assumption and full and equitable accounting to member-patrons and the inherent limitations of cooperative production or farming seem to limit the place of contract feed financing or contract production operations in cooperatives.

It is important that cooperatives with diversified types of farmer-members share costs as much as possible without penalizing

all users in order to achieve complete equitability. The real limitation often lies in how well the total membership recognizes and understands these problems.

Partially Integrated Operations

Information obtained in the course of this study indicated that organizations with the least degree of integration in their services for broiler and turkey producers generally were in the most vulnerable position.

Losses in one operation could not be offset by gains in others; services essential to a well-rounded program could not be carried by other operations; a dependable source of quality chicks was not always assured; production practices could not all be supervised; and a supply of broilers could not be scheduled on a regular basis to processing plants.

Not all associations kept accounting records that enabled management to know the results of each integrated operation and to make comparisons with operations of other associations or firms.

Indirect Control of Financing

Some of the organizations in this study supplied or financed feed directly with producers. Others worked with producers through branch stores or affiliated retail agencies or cooperatives.

Under the latter plan, decisions and procedures had to move through an intermediate step, thus slowing up operations--even when local stores were under management contracts with the regional association. Contract financing and production could not be concentrated satisfactorily because most retail outlets wanted more feed volume and this limited the planning of uniform production and collection of birds around processing plants.

This procedure also required gross margins to cover both wholesale and retail costs. And it did not give as close control nor permit as fast remedial action in problem cases as did direct financing programs.

Coordinating Production and Market Needs

Fluctuating prices and a generally unacceptable level of prices have created an interest in some type of Government sponsored program that producers could adopt and that would influence production, prices, and returns to growers. Such a program could affect the extent that cooperatives finance feed and other supplies for broiler and turkey production in the future and the direction they might follow.

Under a system of marketing orders, for example, the relative position of cooperatives in the industry at the time the orders were adopted might determine the future contract production of individual associations as well as other firms.

Of course, revision of initial bases or above-quota types of production might be possible. Also bases for individual farmers who in turn could affiliate with cooperatives or other firms of their choice might vary as conditions warrant.

Alternative Contracting Plans Mentioned

In the course of this study, cooperatives raised questions regarding two possible alternative contracting programs.

The first type was a specialized, integrated poultry cooperative to produce and market broilers or turkeys. This would be organized, controlled, and financed by regional farm production supply cooperatives. The main objective would be to more fully utilize the feed and supply facilities of the member regional cooperatives--whether the mills were individually or jointly owned.

The contract producers probably would not have a direct voice in such a federated cooperative. Their relations with it would be similar to those with other contracting firms.

Presumably the specialized cooperative would be responsible for contracting directly with producers; supervising the programs; operating breeder farms, hatcheries, and processing plants; and providing a selling service. The specialized cooperative might be given authority to contract in the most advantageous area or areas which would result in increased use of the mills in those areas. This likely would not present problems where a special federated feed manufacturing cooperative owned or managed several mills.

The second possible type of contracting program mentioned was a specialized, integrated poultry cooperative which would be organized and controlled by individual broiler or turkey producers.

The objective of such a cooperative would be to contract with its own members to produce and market poultry meat. It would provide all the integrated services necessary to do the job in the most efficient and profitable manner for the producer-members. This would represent a type of cooperative production or cooperative farming and its success would depend entirely upon the success of the overall integrated broiler or turkey enterprise.

Alternative financing or contracting proposals were not included in the objectives of this study. However, the first alternative, a specialized federated cooperative would be similar to successful federated associations that regional cooperatives have established to manufacture feed and fertilizer and to process and sell various farm products.

As to the second possibility, we do not know of any specialized cooperative where members contract among themselves to produce and market poultry on a pooled or cooperative risk-sharing basis. It appears that such a cooperative might find it difficult to accumulate the large amounts of capital required for such a completely integrated operation.

Recommendations and Guidelines

This section is directed to two groups--one, cooperatives that provided the basic information for this report; and two, other cooperatives and businesses considering adding poultry feed financing to the services they now provide for their patrons.

Specific recommendations are made for each group. Naturally there is some duplication and overlapping as some of the suggestions are equally applicable to organizations now operating and those contemplating feed financing programs.

For Improving Programs Studied

These recommendations are based on our study of the nine cooperatives covered in this report and our observations of similar broiler and turkey feed financing programs in other associations.

We believe it would be advisable to:

1. <u>State contract terms more concisely in language that all interested parties can clearly understand</u>. All provisions covering ownership, time or duration of contract, responsibilities for production items and operations, and responsibilities for marketing, as well as contract settlement and incentive allowances, need to be stated in simple terms. Use of more subheads and more paragraphs would make most contracts easier to read and understand.

2. <u>Screen selected and prospective producers more carefully to avoid excessive losses from mediocre flock management.</u> Producers under contract should clearly

understand that they have an obligation to their farmer-partners in the cooperative to achieve optimum production efficiency on poultry meat production. Too often growers under contract with farmer cooperatives fail to realize this.

3. Place more emphasis on the soundness of the feed financing enterprise and adequate security than on the opportunity it affords for increasing feed volume. This means careful and limited selection of growers in concentrated areas where they can be served with bulk feed and can be supervised or at least be provided with good management advisory service. It also means that production should be concentrated in areas around processing plants to facilitate scheduling deliveries more efficiently.

Administering such a program would require strong leadership on the part of management and directors in selecting areas to finance and in rejecting assistance to local cooperatives and agents who would like additional feed tonnage yet cannot be served by existing facilities.

4. Help make available or provide secured production credit services for independent broiler and turkey growers. Credit service can be provided through some specialized agency such as production credit associations, rural credit unions, or local banks; or through the cooperative's own credit department or subsidiary.

In some cooperatives, members' revolving capital equities may be used as security with existing credit agencies. In other cases, cooperatives may guarantee all or a substantial portion of the loans which are channeled through the credit agencies.

Some producers may always prefer to produce poultry independently, rather than under contract. From the standpoint of a cooperative made up of several types of farmers, this should be encouraged; then the entire membership is not providing resources and assuming risks for the poultry enterprise. If cooperatives can assist their farmer-members in obtaining needed credit, they will have a better chance of operating successfully.

An intensive educational program on the advantages of independent production and financing should be conducted among producers to get and keep as many as possible on this basis.

5. Plan to develop more completely integrated broiler operations if broiler and turkey feed is to be financed on a contract basis. This may mean operating a breeder farm, hatchery, processing plant, and sales agency as well as a feed mill.

Some cooperatives without processing and selling services might explore the feasibility of acting as bargaining agent for growers. A centralized "clearinghouse" for cooperatively produced broilers could increase bargaining power and improve marketing efficiencies. Supervised cooperative marketing could strengthen this weak link in contract feed programs where the cooperative does not process and market all contracted birds.

Associations depending solely on feed manufacturing often have had to reduce broiler chick placements when prices declined. This has further aggravated the margin squeeze by increasing per unit manufacturing costs. With a completely integrated program, a specific service may be continued although it fails to be self-supporting and losses often can be minimized or eliminated on an aggregate basis.

For Establishing and Operating Financing Plans

The suggestions in this section are primarily intended to serve as guidelines for cooperatives and other businesses interested in establishing and operating turkey and broiler feed financing programs as an added service to their patrons.

In undertaking and providing a service of this kind, management might find it worthwhile to:

1. Determine volume of broiler and turkey feed needed for your mill to break even and for it to realize reasonable net margins. Rated one-shift capacity should be achieved as nearly as possible without relying on non-risk-sharing contracts with producers.

2. Determine how much financing you will need to provide for producers to get these volumes. In recent years most of the broiler feeds have been financed. The amount of turkey feeds financed has varied depending upon security that producers could offer, including their revolving equities in successful, integrated cooperatives.

3. Decide the role your organization is to take in providing integrated services for broiler and turkey producers in your area. Analyze your region's advantages and disadvantages in costs of producing broilers or turkeys. If the analysis is favorable and you desire to undertake such enterprises, it appears advisable to provide fairly complete vertically integrated services for most of the producers you finance under both a contract and a secured basis. This spreads risks while providing needed services.

Consider whether it might be feasible or wise to join with other firms in setting up a specialized, integrated broiler or turkey cooperative or company which would use some of the feed from your mill. Also explore possibilities of providing some integrated services through contractual arrangements with other firms.

4. Determine how much of your total assets you wish to allocate to finance broiler or turkey production and to provide other integrated services. The amount will vary among firms depending upon need and opportunities in other operations. Long-term budgeting is necessary whether poultry is produced on a non-risk-sharing contract basis or a risk-sharing secured note basis.

5. Select and develop concentrated areas in which to provide feed financing services. This is especially important with contract broiler production. Concentrated production areas increase ease of overall control and coordination. Efficiencies in distributing supply items and transporting live poultry to processing centers increase as production areas are concentrated.

6. Finance feed with independent producers to the extent possible. Try to limit contract feed financing to tonnage needed to meet minimum needs of feed mills. Help farmers obtain credit from existing specialized agencies, such as production credit associations, local banks, credit unions, and the like. This is especially important with turkeys because operating capital is tied up for longer periods than with broilers.

7. Select growers carefully--both for contract financing and independent production financing. Adequate grower production ability is important in avoiding unnecessary costs. Part-time growers using contract broiler production as a "sideline" to supplement other income rarely measure up to full-time farmers' production efficiencies. With started turkeys under a secured financing arrangement, this may not apply.

8. Handle contract production directly with producers rather than through local dealers, agencies, or cooperatives if your organization is regional in scope. Dealing directly with producers will provide closer control and help avoid demands from retail outlets for excessive financing.

9. Keep detailed records on each phase of program. Internal records should be kept on costs and receipts for each operation or function of an integrated program. While these functions may not always operate in the black, management needs to know what each one is doing. This type of recordkeeping is difficult when the cooperative or firm has other marketing and farm supply departments.

Evaluation of the program should be based on overall results of the turkey or broiler enterprise.

10. Require producers to carry part of the risks and thus share in losses as well as gains. This is especially desirable in cooperatives which have members engaged in other farming enterprises. Producers with a cash interest in a poultry flock will generally exercise greater care. Growers will be more interested in efficient growing practices and innovations and will accept them more readily if there is a shared gain and loss arrangement.

Losses should be defined as cash outlays that exceed receipts, rather than losses resulting from depreciation or a lack of any return for labor and fixed assets.

11. Use concise contracts that clearly state the responsibilities of each party. Ownership and title of all production supplies should be clearly stated. Duration of contract should be clearly defined. Production schedules should be agreed to and varied by season and locale. Risk transfer costs and violation recourse must be stipulated. Local dealer or cooperative must have a considerable voice in management production practices. The relationship of contract producers to the entire membership of the cooperative should be stated.

12. Encourage good management and competent production by using feeding efficiency schedules coupled with grower incentive payments. Keep guarantees to a realistic minimum by maintaining an up-to-date optimum feed conversion ratio based on improved growing practices. Cooperatives might use patronage refunds on feed; other companies might use yearend incentives to encourage efficient production.

13. Use procedures in financing feed to independent producers that established lending agencies have found to be sound. Obtain a complete financial record of each individual producer. Secure and register production loan on sufficient chattel to cover it. Base interest charges on the prevailing money market.

14. Endeavor to make periodic estimates of price trends, market conditions, and related information. Cooperatives and other businesses need to maintain and review current economic data pertaining to the industry if they are to be of maximum service to their farmer-members and patrons.

Other FCS Publications Available

Controlling Open Account Credit in Feed Cooperatives. FCS Circular 24, Charlie B. Robbins and Lacey F. Rickey.

Methods of Financing Farmer Cooperatives. General Report 32, H. H. Hulbert, Nelda Griffin, and K. B. Gardner.

Employee Incentive Plans in Farmer Cooperatives, 1957. General Report 62, Nelda Griffin.

Credit Control in Selected Retail Farm Supply Cooperatives, Area VI, New York, New Jersey, Virginia, West Virginia, North Carolina, and Georgia. General Report 71, John M. Bailey.

Mobile Feed Milling by Cooperatives in the Northeast. General Report 99, T. R. Eichers and A. J. Hangas.

Integrated Feed Operations Through Farmer Cooperatives, 1959. General Report 100, Anne L. Gessner.

Statistics of Farmer Cooperatives, 1960-1961. General Report 112, Anne L. Gessner.

Handbook of Major Regional Cooperatives Handling Farm Production Supplies, 1960 and 1961. General Report 106, J. Warren Mather.

Lawn and Garden Services in Eastern Farmer Co-ops. General Report 107, John M. Bailey.

Regional Cooperatives Handling Under $10 Million of Supplies, 1960-61. General Report 115, J. Warren Mather and Anne L. Gessner.

A copy of each of these publications may be obtained while a supply is available from--

Farmer Cooperative Service
U.S. Department of Agriculture
Washington 25, D.C.